

-14-

CLAIMS

1. A wrench including:

first and second jaw members each having first and second gripping portions for gripping an article to be rotated about a work axis and a leverage portion spaced from said gripping portion;

a handle connected to the leverage portion of the first jaw member for pivoting movement relative thereto about a leverage axis parallel to said work axis;

engagement means on said handle or operatively connected to said handle for movement therewith for engagement with the leverage portion of said second jaw member for urging said first and second leverage portions apart, and

connecting means connecting said first and second jaw members and holding them in opposed disposition, said connecting means being operatively interposed between said respective opposed gripping portions and said opposed leverage portions and being arranged to allow pivoting of one of said jaw members relative to the other, the connecting means being adjustable to vary the distance between the gripping portions to suit different sized articles.

2. A wrench including:

first and second jaw members each having first and second gripping portions for gripping an article to be rotated about a work axis and a leverage portion spaced from said gripping portion;

a handle connected to the leverage portion of the first jaw member for pivoting movement relative thereto about a leverage axis parallel to said work axis;

engagement means on said handle or operatively connected to said handle for movement therewith for engagement with the

-15-

leverage portion of said second jaw member for urging said first and second leverage portions apart;

2 another handle in fixed relationship to and extending from the leverage portion of the second jaw member, and

5 connecting means connecting said first and second jaw members and holding them in opposed disposition, the connecting means being operatively interposed between said respective opposed gripping portions and said opposed leverage portions and being arranged to allow pivoting of one of said jaw members against the other, the connecting means being adjustable in length to vary the distance between the gripping portions to suit different sized articles.

3. A wrench according to Claim 2, wherein the handles are located in the plane of rotation about the work axis.

4. A wrench according to Claim 2 or Claim 3, wherein the handles are arranged in operative juxtaposition with each other for gripping of both handles by one hand of a user.

20 5. A wrench according to any one of Claims 2 to 4, wherein the handle pivotally attached to the first jaw member may be pivoted towards the other handle to tighten the grip of the gripping portions and away from the other handle to loosen the grip of the  
25 gripping portions.

6. A wrench according to any one of the preceding claims, wherein the connecting means is in pivotal engagement with at least one jaw member.

30 7. A wrench according to any one of the preceding claims, wherein the connecting means is length adjustable.

-16-

8. A wrench according to any one of the preceding claims, wherein the connecting means is in the form of a length adjustable nut and bolt assembly.

5 9. A wrench according to Claim 8, wherein the nut is in the form of a cylindrical pin having a diametral bore for receiving a length adjustable bolt comprising a sleeve and a screw in threaded engagement with a threaded bore extending axially into the sleeve.

10. A wrench according to Claim 8 or Claim 9, wherein the nut and bolt assembly is pivotally connected to the first jaw member and the second jaw member includes a passage for accommodating the length adjustable bolt, and permitting relative, but limited, pivoting movement of the length adjustable bolt within the passage.

11. A wrench according to Claim 10, wherein the passage is formed as a tapered bore tapering outwardly towards the first jaw member.

12. A wrench according to any one of Claims 9 to 11, wherein the screw has a head held captive in a head retaining cavity provided in the second jaw member, and some of the perimeter of the head is exposed on one or both sides of the second jaw member for turning in a similar fashion to a thumb wheel.

13. A wrench according to any one of the preceding claims, and including biasing means operatively connecting the jaw members for biasing the jaw members towards one another.

14. A wrench according to any one of the preceding claims, wherein the engagement means includes a cam in fixed relationship

-17-

with the handle and co-operable with an abutment surface on the leverage portion of the second jaw member for urging the leverage portions apart.

- 5 15. A wrench according to Claim 14, wherein the cam is located close to the handle's pivotal connection to the first jaw member and is wedge shaped along a curved axis to provide an inner curved face which is coaxial with the leverage axis.
- 10 16. A component for a wrench as claimed in any one of Claims 1 to 15. *a*
- 15 17. A wrench substantially as hereinbefore described with reference to Figs. 1, 2, and 5 to 11.
- 20 18. A wrench substantially as hereinbefore described with reference to Figs. 3, 4, and 5 to 9.
19. A wrench substantially as hereinbefore described with reference to any one of Figs. 1 to 11.
- 20 20. A component for a wrench substantially as hereinbefore described with reference to any one of Figs. 1 to 11.

*Add A1*  
*Add B1*